

CLAIMS:

1. A method of forming patterns, characterised in that said method comprises a step of forming a first metal film on a substrate, a step of forming a second metal film on said first metal film and a step of forming patterns of a source electrode, a drain electrode and a source bus by patterning said second and first metal films,
- 5 and further characterized in that said step of forming the patterns of the source electrode, the drain electrode and the source bus comprises a step of forming a resist coat on said second metal film and a first etching step of dry-etching said second and first metal films after said step of forming said resist coat.
- 10 2. A method of forming patterns as claimed in claim 1, characterised in that said first metal film is an ITO film mainly including ITO and the second metal film is a molybdenum-chromium film mainly including a molybdenum material, and further characterised in that said first etching step is a step of dry-etching said molybdenum-chromium film and said ITO film with a mixed gas of chlorine and oxygen.
- 15 3. A method of forming patterns as claimed in claim 1, characterized in that said method comprises, instead of said first etching step, a second etching step of wet-etching said second metal film and then dry-etching said first metal film.
- 20 4. A method of forming patterns as claimed in claim 3, characterised in that said first metal film is an ITO film mainly including ITO and the second metal film is a molybdenum-chromium film mainly including a molybdenum material,
- and further characterised in that said second etching step is a step of wet-etching said molybdenum-chromium film with a mixed etchant of phosphoric acid, nitric acid
- 25 and water and subsequently dry-etching said ITO film with a gas mainly including chlorine.
5. A method of forming patterns as claimed in claim 1, characterized in that said method comprises, instead of said first etching step, a third etching step of wet-etching said second and first metal films and then wet-etching said second metal film further.

6. A method of forming patterns as claimed in claim 5, characterised in that said first metal film is an ITO film mainly including ITO and the second metal film is a molybdenum-chromium film mainly including a molybdenum material,

5 and further characterised in that said third etching step is a step of wet-etching said molybdenum-chromium film with a mixed etchant of phosphoric acid, nitric acid and water, subsequently wet-etching said ITO film with a hydrochloric acid etchant and further wet-etching said molybdenum-chromium film with a mixed etchant of phosphoric acid, nitric acid and water.

10

7. A method for forming patterns as claimed in claim 3 or 5, characterized in that said first metal film has a thickness not greater than 500 angstrom. ~

8. A semiconductor device characterised by comprising a source electrode formed on a substrate, a source bus formed on said source electrode, a drain electrode that is formed on said substrate and comprises a first electrode and a second electrode formed on said first electrode, ~

15

and further characterized in that an edge portion of said source electrode protrudes toward said drain electrode relative to an edge portion of said source bus and an edge portion of said first electrode of said drain electrode protrudes toward said source electrode relative to said second electrode.

20

9. A semiconductor device as claimed in claim 8, characterized in that each edge portion of said source electrode, said source bus, said first electrode and said second electrode is formed into a surface which is perpendicular to said substrate.

25

10. A semiconductor device as claimed in claim 8, characterized in that each edge portion of said source electrode, said source bus, said first electrode and said second electrode is formed into a surface which is inclined relative to said substrate.

30